Application No. 09/490,631   Customer No. 01933
Response to Office Action

Amendments to the Specification:

Please amend the paragraph at page 11, line 25 to page 12, line 8 as follows:

FIGS. 4A and 4B show an element cell imitating a diode function. This element cell has two terminals having polarities. For example, as shown in FIG. ~~3A~~ 4A, assume that the cathode and anode are defined to have positive and negative polarities, respectively. If the number of particles in the cathode-side pipe is larger than that in the anode-side pipe, no particle movement occurs. However, as shown in FIG. ~~3B~~ 4B, when the cathode and anode are negative and positive, respectively, the particles smoothly move from the anode to the cathode with an increase in the number of particles.

Please amend equation (9) at page 14, line 21 as follows:

$$V_p = L_p \frac{di_p}{dt} + M_{px} \frac{di_x}{dt} \qquad \cdots (9)$$

-2-